

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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1. (Currently Amended) A portable communications terminal comprising:
- display part for displaying an image, the display part including a projection micro-
display;
- main body having at least a speaker for outputting voice, and a pointing device for
controlling at least a cursor displayed as said image; and
- joining part for joining said display part to said main body in an angularly movable
fashion, and wherein:
- said speaker is disposed on one main surface of said main body, [[and]]
- said pointing device is disposed on the other main surface of said main body opposite
from said one main surface, and
- control of the cursor using the pointing device is only performed by the same hand that
holds the main body.
2. (Original) The portable communications terminal according to claim 1, further
comprising an auxiliary display, mounted in said main body, for displaying at least textual
information.
3. (Original) The portable communications terminal according to claim 1, wherein
said display part includes a first member where said display surface is provided, and a second
member joined to said first member in an angularly movable fashion.
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4. (Original) The portable communications terminal according to claim 1, wherein an answer button is provided to answer an incoming call with the display surface of said display part covered by said main body.

5. (Original) The portable communications terminal according to claim 1, wherein said joining part joins said display part to said main body in a detachable fashion.

6. (Currently Amended) An information display device comprising:

imaging means of capturing an image;

image processing means of processing the image captured by said imaging means;

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position detecting means of detecting from said processed image the position of said image on a screen;

display means of displaying prescribed information on a display surface, the display means including a projection micro-display;

control means of displaying a designated pointer on said display surface in accordance with the position detected by said position detecting means and controlling the pointer using only the same hand that holds the information display device;

antenna for transmitting and receiving radio waves for wireless communications;

transmit processing means of processing a signal to be transmitted in the form of said radio waves; and

receive processing means of processing the radio waves received by said antenna as a signal.

7. (Previously Presented) The information display device according to claim 6, wherein said display means makes said display surface be equal in size to a region within which said imaging means captures said image, or to be smaller than said capture region.

8. (Previously Presented) The information display device according to claim 6, wherein said image processing means extracts a contour of said image, and

said position detecting means detects the position of said image on a screen from said extracted contour.

9. (Original) The information display device according to claim 6, wherein said image processing means performs processing on portions of said image that are designated by a specific color and/or a specific temperature, and/or on portions of said image that lie within a focal length of said imaging means.

10. (Previously Presented) The control input device comprising:
the information display device according to any one of claims 6 to 9 and 21 to 22; and
input means of carrying out a control input on an object pointed to by said pointer on said display surface.

11. (Original) The control input device according to claim 10, further comprising image pattern registering means in which are registered one or a plurality of image patterns associated with one or a plurality of said control inputs respectively, and wherein:

said input means compares the image captured by said imaging means or the image extracted by said image processing means with the image patterns stored in said image pattern

registering means and, if said extracted image matches any one of said image patterns, carries out a control input that corresponds to said matching image pattern.

12. (Original) The portable communications terminal comprising:

control input device according to claim 10;

main body containing at least said imaging means and said antenna;

display part containing at least said display means; and

joining part for joining said main body to said display part in an angularly movable fashion.

Cont 13. (Previously Presented) A portable communications terminal according to claim 1 or 9, further comprising a detection switch for detecting said main body being held by a user, said detection switch being mounted on said other main surface or a side face of said main body, and wherein:

said display part is activated when said detection switch detects said main body being held by a user, and

said display part is deactivated when said detection switch no longer detects said main body being held.

14. (Currently Amended) A portable communications terminal comprising:

display part having a display surface for displaying an image, the display part including a projection micro-display;

main body having at least an antenna for transmitting or receiving radio waves for wireless communications, and speaker for outputting voice;

joining part for joining said display part to said main body in an angularly movable fashion;

attitude detecting means of detecting the attitude of said main body; [[and]]

display orientation switching means of switching the orientation of said image displayed on said display part, based on a detection result output from said attitude detecting means;
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a pointing device for controlling a cursor on the display part, wherein control of the cursor using the pointing device is only performed by the same hand that holds the main body.

15. (Original) The portable communications terminal according to claim 14, wherein said attitude detecting means detects the attitude of said main body by using a mercury switch.

16. (Original) The portable communications terminal according to claim 14, wherein said orientation detecting means detects the attitude of said main body by using a gyro.

17 (Original) A control input method using a control input device according to claim 11, comprising the step of performing a prescribed gesture so as to be captured by said imaging means, wherein

said control output is produced by said prescribed gesture.

18. (Original) A program for causing a computer to function as all or part of the means of the information display device described in claim 6, said means consisting of imaging means of capturing an image, image processing means of processing the image captured by

said imaging means, position detecting means of detecting from said processed image the position of said image on a screen, and display means of displaying prescribed information on a display surface.

19. (Original) A program for causing a computer to function as all or part of the input means of the control input device described in claim 10, said input means carrying out a control input on an object pointed to by said pointer on said display surface.

20. (Original) A program for causing a computer to function as all or part of the means of the portable communications terminal described in claim 14, said means consisting of attitude detecting means of detecting the attitude of said main body, and display orientation switching means of switching the orientation of said image displayed on said display part, based on a detection result output from said attitude detecting means.

21. (Currently Amended) The portable communications terminal ~~information display~~ device according to claim ~~[[6]]~~1, further comprising:

antenna for transmitting and receiving radio waves for wireless communications;

transmit processing means of processing a signal to be transmitted in the form of said radio waves; and

receive processing means of processing the radio waves received by said antenna as a signal.

22. (Previously Presented) The information display device according to claim 6, wherein the image that said imaging means captures is a fingertip.

23. (Previously Presented) The control input device according to claim 10, wherein said designated pointer is displayed by detecting a fingertip as said image.

24. (Previously Presented) The control input device according to claim 10, wherein said position detecting means compares the image captured by said imaging means or the image extracted by said image processing means with a plurality of image patterns corresponding to said control inputs respectively, and when said captured or extracted image matches any one of said image patterns, said input means carries out a control input that corresponds to said matched image pattern.

25. (Previously Presented) The control input device according to claim 10, wherein said position detecting means compares the images captured by said imaging means or the images extracted by said image processing means with a combination of a plurality of image patterns corresponding to one said control input, and when said captured or extracted images match any one of said combination of image patterns, said input means carries out a control input that corresponds to said matched combination of image patterns.

26. (Currently Amended) An information display method comprising:

imaging step of capturing an image of an object;

image processing step of processing the image captured by said imaging step;

position detecting step of detecting from said processed image the position of said object on a display;

display step of displaying prescribed information on a projection micro-display, separately obtained from the imaging step, on the display; and

control step of displaying a designated pointer on said display in accordance with the position of the object detected by said position detecting step and controlling the pointer using only the same hand that holds the projection micro-display.

27. (Previously Presented) The information display method according to claim 26, wherein the image captured by said imaging step is a fingertip.

28. (Previously Presented) The information display method according to claim 26, wherein said display step makes said display surface be equal in size to a region within which said imaging step captures said image, or be smaller than said capture region.

29. (Previously Presented) The information display method according to claim 26, wherein said image processing step extracts a contour of said image, and

said position detecting step detects the position of said image on a screen from said extracted contour.

30. (Previously Presented) The information display method according to claim 26, wherein said image processing steps performs processing on portions of said image that are designated by a specific color and/or a specific temperature, and/or on portions of said image that lie within a focal length of said imaging means.

31. (Previously Presented) The control input method comprising:

the information display method according to anyone of claims 26 to 30; and

input step of carrying out a control input on an object pointed to by said designated pointer on said display surface.

32. (Previously Presented) The control input method according to claim 31, wherein said designated pointer is displayed by detecting a fingertip as said image.

33. (Previously Presented) The control input method according to claim 31, wherein said position detecting step compares the image captured by said imaging step or the image extracted by said image processing step with a plurality of image patterns corresponding to said control inputs respectively, and when said captured or extracted image matches any one of said image patterns, said input step carries out a control input that corresponds to said matched image pattern.

34. (Previously Presented) The control input method according to claim 31, wherein said position detecting step compares the images captured by said imaging step or the images extracted by said image processing step with a combination of a plurality of image patterns corresponding to one of said control input, and when said captured or extracted image match any one of said combination of image patterns, said input step carries out a control input that corresponds to said matched combination of image patterns.

35. (Previously Presented) The information display method according to any one of claims 26 to 30, wherein said display is used for a portable communication terminal or a portable telephone.